

# Ozone Pollution:

## Why it matters & what *you* can do to help prevent it

### What is ozone?

Ozone is a gas. It can be good or bad depending on where it is located.

- Ozone in the upper atmosphere is good. Up high, it occurs naturally and helps protect us from the sun's ultraviolet rays.
- Ozone at ground level is bad. Near the surface of the earth, in the air we breathe, ozone is not natural and is considered an air pollutant.

### What causes bad ozone?

Ground-level ozone is formed when nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) combine in the presence of heat and sunlight. Some sources of NO<sub>x</sub> and VOCs include motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents.

Unfortunately, the Treasure Valley is a prime setting for formation of bad ozone, particularly during the summer months when the weather is hot and sunny and lots of activities that produce NO<sub>x</sub> and VOCs are going on.

### Why does ozone pollution matter?

Ground-level ozone is an air pollutant, and like any other pollutant, it can be dangerous to your health.

Inhaling bad ozone can damage lung tissue. It may cause irritation in airways, coughing, rapid or shallow breathing, discomfort when breathing or general chest discomfort. It can aggravate asthma and other respiratory diseases, reduce lung function, and inflame and damage lung tissue.

### How do I know if ozone pollution is high?

Breathing bad ozone is bad for everyone, although it is most harmful to children, adults who are active outdoors, and people with respiratory disease.

Bad ozone also can adversely affect animals and plants.

Ozone is usually highest on hot, sunny days. The Idaho Department of Environmental Quality (DEQ) monitors and measures air pollutants throughout the Treasure Valley. Based on this data and meteorological conditions, DEQ issues daily air quality forecasts.

You can access daily measurements of air pollutants, including ozone, and air quality forecasts on DEQ's Web site at [www.deq.state.id.us/air/air1.htm](http://www.deq.state.id.us/air/air1.htm).

## What do DEQ's air quality forecasts mean?

The following symbols are used to notify the public of air quality conditions in the Treasure Valley:



Air quality is good and expected to remain so. No mandatory restrictions. Make commuting and purchasing decisions with the quality of the air in mind.



Air quality is deteriorating and pollution may increase. No burning recommended valley-wide. Check local burning ordinances. Voluntary steps to reduce ozone formation encouraged.



Air quality is poor and expected to worsen. Follow "yellow" precautions. Local ordinances may prohibit burning. Sensitive populations should avoid exposure. Everyone should avoid outside activity during peak daytime heat.

## What can I do to help prevent ozone pollution?

### On green days:

- ✓ Avoid topping off your tank! Keep gasoline vapors in your tank — not in the air. Be careful not to spill fuel and always tighten gas cap securely.
- ✓ Keep car, boat, and other engines tuned up according to manufacturers' specifications.
- ✓ Be sure your tires are properly inflated.
- ✓ Carpool, use public transportation, bike or walk whenever possible.
- ✓ Follow manufacturers' guidelines for use and storage of products made with solvents that evaporate easily. Properly seal all solvent containers.
- ✓ Conserve energy at home, at work, everywhere.

### On yellow and red days:

- ✓ Choose a cleaner commute, share a ride to work, or use public transportation.
- ✓ Avoid use of gasoline-powered lawn and garden equipment during the day.
- ✓ Refuel cars and trucks after dusk.
- ✓ Combine errands and reduce trips.
- ✓ Limit engine idling.
- ✓ Use household, workshop, and garden chemicals in ways that keep evaporation to a minimum or delay using when poor air quality is forecasted and on hot, sunny days.
- ✓ Use low VOC or water-based paints whenever possible.

*Treasure the Valley's Air* is a coalition of local partners working together to implement community-based projects to improve and protect air quality in the Treasure Valley.

### For more information

#### Contact:

Idaho Department of Environmental Quality  
Boise Regional Office  
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Boise, ID 83706  
(208) 373-0550

#### Log on:

DEQ's Boise Region Air Quality Monitoring Web page:

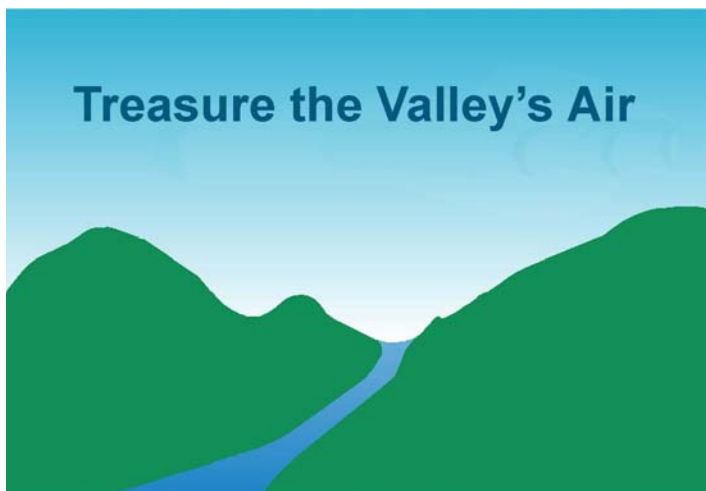
[www.deq.state.id.us/air/monitoring/bro\\_aq1.htm](http://www.deq.state.id.us/air/monitoring/bro_aq1.htm)

DEQ's Daily Air Quality Report:

[www.deq.state.id.us/air/dailyreports/aji\\_report\\_new.cfm](http://www.deq.state.id.us/air/dailyreports/aji_report_new.cfm)

Local Ordinance Summary for Burn Bans in the Treasure Valley

[www.deq.state.id.us/air/dailyreports/ordinance\\_summary.pdf](http://www.deq.state.id.us/air/dailyreports/ordinance_summary.pdf)



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